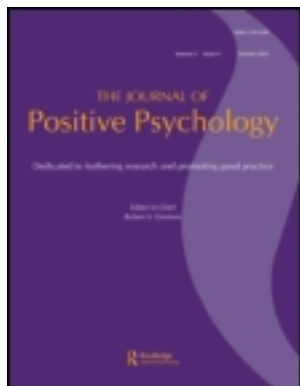


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## Character strengths and well-being among volunteers and employees: Toward an integrative model

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The endorsement and deployment of character strengths in occupational contexts are two promising components for understanding how people create well-being. In this study, a model integrating character strengths, satisfaction with occupational activities, and meaning and well-being was proposed and tested in two samples of volunteers and a sample of working adults. The model fit the data well in all three samples. Results demonstrated that deploying strengths at work provided key links to satisfaction with voluntary and paid occupational activities and to meaning among both young and middle-aged volunteers, and adult working women. Among adult volunteers and paid workers, endorsing strengths was related to meaning, while both endorsing and deploying strengths were related to well-being. Together, these studies provide a model for understanding how strengths may play a role in how both volunteer and paid workers find meaning, well-being, and satisfaction.

**Keywords:** character strengths; job satisfaction; life satisfaction; subjective well-being; VIA-IS (Values in Action Inventory); meaning in life; vocational activities

### Introduction

‘Good character’ has been described as composed of virtues, character strengths, and situational themes (Peterson & Seligman, 2004). Character strengths are conceived as being similar to personality traits in that they are durable individual differences that manifest in thoughts, feelings, and behaviors to various degrees among different people. However, they are thought to be different because of the moral and cultural value placed on them. In this sense, character strengths capture those qualities that are best about people and capture their potential to contribute to the world around them and achieve well-being (Peterson & Seligman, 2004). Accordingly, the endorsement of individual character strengths has been linked to well-being (Steger, Hicks, Kashdan, Krueger, & Bouchard, 2007). In particular, character strengths associated with social interaction, such as altruistic love and gratitude, (Park & Peterson, 2008), and optimism, such as hope and enthusiasm (Park, Peterson, & Seligman, 2004) are positively related to well-being. In addition, people’s overall levels of character strengths are positively related to satisfaction with the past (Peterson & Seligman, 2004) and optimism about the future (Duckworth, Steen, & Seligman, 2005).

Beyond the ‘absolute value’ for well-being of seeing oneself as possessing character strengths, one of the

central ideas in character strength theory is that there are optimal matches between strengths and context. Context may affect the opportunity to deploy one’s strengths, as well as the way in which they can be deployed. For example, certain strengths appear important for maintaining well-being in the context of trauma and adversity, such as hope, generosity, self-restraint, and control (Park & Peterson, 2008). This research complements other data showing that people appeared to endorse more socially concerned strengths (e.g., gratitude, hope, generosity, altruistic love, loyalty to a team) following the 9/11 terrorist attacks (Peterson & Seligman, 2003). Further, character strengths mediate between difficult life experiences and well-being (Pedrotti, Edwards, & Lopez, 2008). Endorsing personal strengths may support well-being both directly as a recognition of self-worth, and also indirectly through their use in specific situations and contexts. This study examines both overall endorsement of signature strengths, and their deployment, in the context of voluntary and paid work.

### Character strengths and meaning in life

The way in which people deploy their character strengths figures heavily in Seligman’s (2002) ideas about how people achieve well-being. At the

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highest level, Seligman (2002) argued that the meaningful life is one in which people use their character strengths in the context of serving some greater good. A sense of meaning in life was considered to be a critical component of a life well-lived for decades prior to the positive psychology movement (e.g., Frankl, 1965). According to meaning in life theory, individuals seek more than alleviation of their suffering or reducing sadness and concern. They yearn for meaning in their lives (Duckworth et al., 2005). Meaning in life refers to one's ability to perceive oneself and the world as worthwhile and valued, identify a unique niche, and establish a valued life purpose (Steger, 2009). Meaning in life is positively related to well-being, self-realization, and fulfillment (King, Hicks, Krull, & Del Gaiso, 2006; Steger, Frazier, Oishi, & Kaler, 2006), and also to job satisfaction (Rubinstein, 2006) and positive work attitudes (Bonebright, Clay, & Ankenmann, 2000; Dik, Sargent, & Steger, 2008; Steger & Dik, 2009b). Yet, little research has been conducted to clarify the relationship between meaning in life and character strengths, particularly as people deploy their strengths in important life domains.

### **Occupational context**

As a major life domain, work is an obvious place to look both because of the amount of people's time it consumes and because of the consistent links between job satisfaction well-being (e.g., Diaz-Serrano & Cabral-Vieira, 2005). Strengths may play a role in people's work performance and satisfaction. Some of this research suggests some differential aptitude for work roles based on strengths; managers are likely to endorse different strengths (e.g., leadership, courage) than non-managerial employees (e.g., generosity, appreciation of beauty; Ruch, Furrer, & Huwyler, 2004). However, at the individual level, character strength based models of well-being heavily prioritize the benefits of being able to deploy one's character strengths in important life domains (Duckworth et al., 2005). Gallup data demonstrates this idea, showing that the opportunity for employees to do what they do best each day – that is, using signature strengths – is a core predictor of workplace engagement, which in turn is a core predictor of a range of business outcomes (Harter, Schmidt, & Hayes, 2002). A better understanding is needed for how people use their strengths in occupational contexts, whether through voluntary or paid work.

Volunteering is an act of assistance performed by an individual who perceives it as valued, long term, planned, and intended to benefit previously unknown elements. Volunteering occurs within an organizational environment, and obviously is not obligated by others or enforced by law (Haski-Leventhal, 2005; Penner, 2002). In many ways, volunteer work is no

different from any other type of work, as it requires the use of resources, time, and energy (Ellis & Noyes, 1990). However, motivations to volunteer may differ from motivations to engage in paid work: people go to work because they get paid; volunteers go to work for other reasons, because by definition they are not being paid. At the same time, volunteer satisfaction strongly resembles job satisfaction; both are influenced by intrinsic benefits (e.g., challenge, interest, growth) and extrinsic benefits (e.g., gratitude from the organization, social ties with other volunteers; Kulik, 2006). Satisfaction is essential to continued volunteering, particularly in light of the fact that volunteers' commitment to organizations stems from good will, moral, and emotional perception of social problems, and not expectations of compensation (Jimenez & Fuertes, 2005). In addition to predicting duration of volunteering, satisfaction with volunteer activities is positively related to life satisfaction (Hulbert & Chase, 1991). Volunteers are more likely to be satisfied with their activities when there is compatibility between their tasks and capabilities, and when they feel their tasks are essential, beneficial, and meaningful (Jimenez & Fuertes, 2005). By extension, it seems highly likely that volunteers experience the greatest satisfaction and well-being when they feel they are using their strengths and when they derive meaning from their volunteer activities. However, no research has been performed to date on character strengths and meaning among volunteers.

### **Purpose of the research and hypotheses**

The purpose of this study was to develop and test an integrative model linking character strengths, meaning, and well-being in the vocational domain. To test the flexibility of the model, we obtained data from three samples. Two of the samples were engaged in voluntary work: adolescents volunteering for a medical response organization (Study 1a) and adults volunteering for a civilian patrol organization (Study 1b). In these samples, because of a lack of measures specific to the meaningfulness of volunteering, we used a meaning in life scale to complement measures of well-being and satisfaction with vocational activities. The third sample consisted of women working for a women's organization (Study 2). In this sample, we were able to use a measure specific to the meaningfulness of work. We tested the model as it applied in all three samples, representing a range of age and vocational activities, as well as voluntary *versus* paid work.

The model we developed focused on accounting for some ways in which one's endorsement of character strengths is related to well-being, with an emphasis on the important occupational life domain (Figure 1a). Central to the notion of character strengths is that as

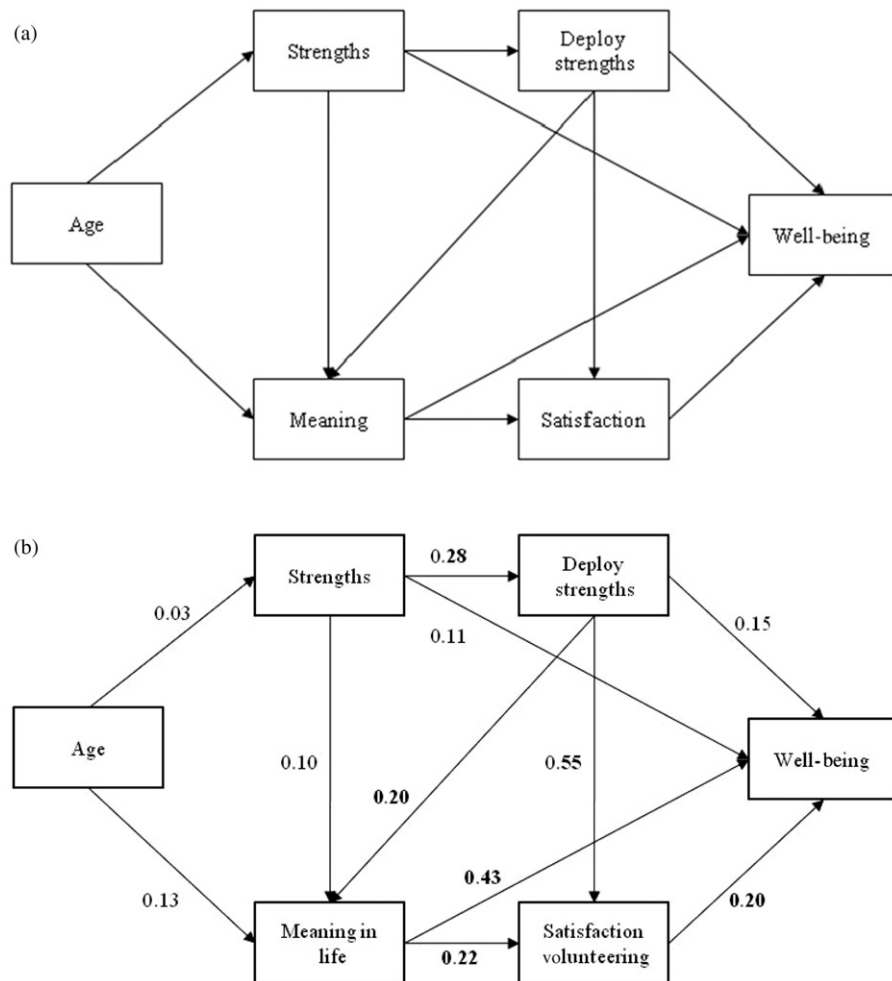


Figure 1. (a): Model of relationships between character strengths and their deployment in occupational activities, meaning, occupational satisfaction, and well-being; note that error terms have been removed for legibility. (b): Study 1a, MDA volunteers; note that error terms have been removed for legibility and coefficients in boldface indicate path significant at  $p < 0.05$ . (c): Study 1b, Civil Guard volunteers; note that error terms have been removed for legibility and coefficients in boldface indicate path significant at  $p < 0.05$ . (d): Study 2, women's organization employees; note that error terms have been removed for legibility and coefficients in boldface indicate path significant at  $p < 0.05$ .

people endorse their character strengths, they will deploy them in important life domains (Peterson & Seligman, 2004). This leads to our first hypothesis:

*H1.* A positive correlation will be found between endorsement of character strengths and strength deployment in vocational activities.

Previous research has indicated that endorsing one's character strengths is related to greater well-being (e.g., Peterson & Seligman, 2004). To some degree, endorsing character strengths requires people to actively value their personal qualities. Because of the positivity of recognizing character strengths, we would predict that there would be some carry over from endorsing character strengths to perceived meaningfulness of life and work experiences and overall well-being.

*H2.* A positive correlation will be found between endorsing character strengths and the sense of meaning they derive from their experiences.

*H3.* A positive correlation will be found between endorsing character strengths and well-being.

At the heart of this model is an appreciation for the theoretical contention that the key to well-being is deploying one's strengths, and that the path to the deepest flourishing and meaning in life is through deploying one's strengths 'in the service of something larger than ourselves' (Seligman, 2002, p. 260). Thus, to supplement the general positivity associated with appreciating one's character strengths, we would predict a positive relation between deploying one's character strengths in occupational activities and both well-being and meaning in life. We would also expect

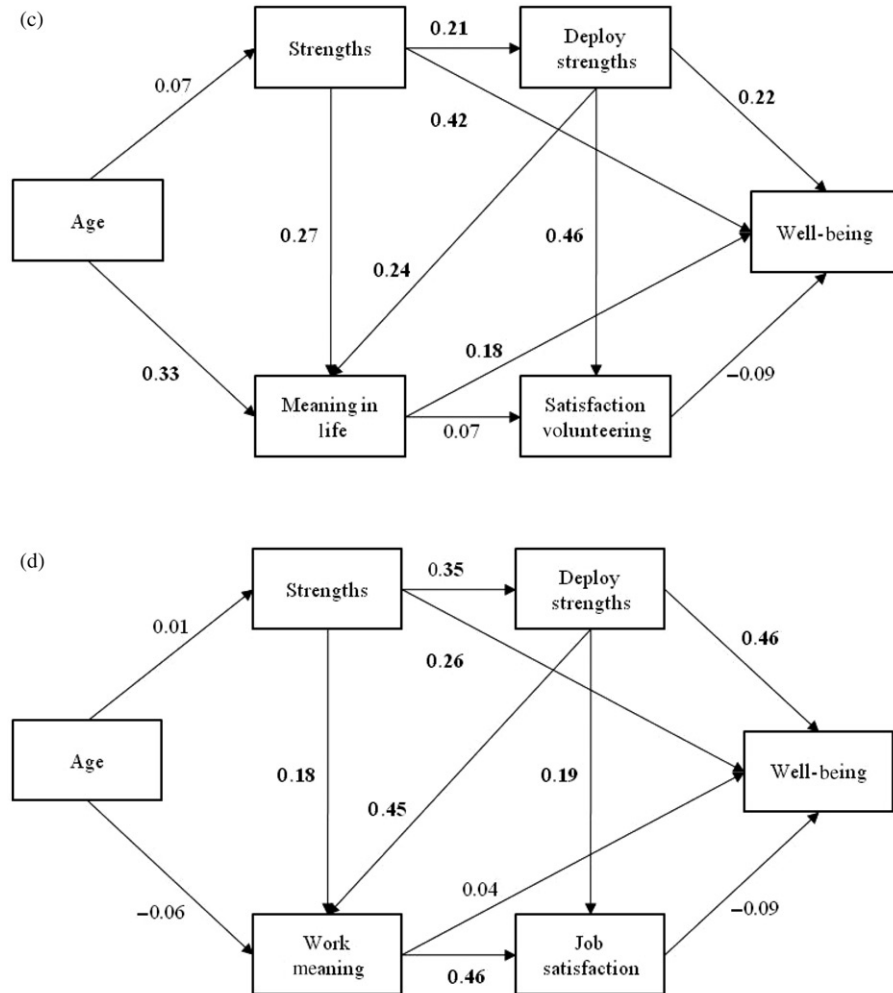


Figure 1. Continued.

that being able to deploy one's strengths in occupational activities would be associated with greater satisfaction with those activities.

*H4.* A positive correlation will be found between the deployment of character strengths and feelings of satisfaction with vocational activities.

*H5.* A positive correlation will be found between the deployment of character strengths and well-being.

*H6.* A positive correlation will be found between the deployment of character strengths and meaning in life.

Finally, in accordance with previous research on positive work adjustment (e.g., Bonebright et al., 2000), we hypothesized that meaning, well-being, and satisfaction with vocational activities would be positively related to each other.

*H7.* A positive correlation will be found between meaning in life and satisfaction with vocational activities.

*H8.* A positive correlation will be found between meaning in life and well-being.

*H9.* A positive correlation will be found between satisfaction with vocational activities and well-being.

Figure 1(a) displays the proposed model and the relationships we anticipated among recognizing and utilizing character strengths, volunteer or work satisfaction, meaning in life and meaning in work, and overall well-being. The guiding research question relates to the suitability of the entire integrative model for depicting relationships between the variables: the overall strength of character strengths, the deployment of character strengths in volunteer and employment activities, meaning in life and work, satisfaction with vocational activities, and overall well-being. Because previous research has suggested that older people tend to rate their strengths as higher (Ruch, Proyer, & Weber, 2010), we included age as a covariate in our model.

### Study 1

We tested the model among volunteers from two different organizations in Study 1: (a) adolescent

volunteers in an emergency medical assistance organization and (b) older, age-diverse volunteers for a neighborhood crime watch organization. The same measures were used with both volunteer groups. We expected the integrative model to fit both groups of volunteers with similar relations among the variables.

### Study 1a: Adolescents

#### Method

##### Participants

The participants in Study 1a consisted of 100 10th–12th graders (52% female; mean age,  $M = 16.76$ ;  $SD = 0.80$ ), volunteering in the Israeli Red Cross (Magen David Adom; MDA Israel, undated) in the cities of Petach Tikva, Herzlia, Kfar Saba, and Jerusalem. MDA is a nationwide organization providing emergency medicine services and pre-hospitalization urgent medical care, and services focused on blood supplies, assistance to elderly and needy, and the prevention of disease and accidents. MDA has over 10,000 volunteers of which 4000 are youth between the ages of 15–18 years, with the remainder spread across older age groups. This study recruited youth volunteers who had worked with MDA for a period ranging from 1 month to 3 years ( $M = 1.40$ ,  $SD = 0.86$ ). Most were Israeli born (89%). Parents of most volunteers had academic degrees (77%), while the rest had postsecondary education (15%) or complete high school (8%) education. Thirty-one percent defined themselves as secular, 23% traditional, 45% religious, and 1% defined themselves as ultraorthodox.

##### Instruments

We used published Hebrew translations of character strengths and well-being. For remaining measures, the first author translated measures into Hebrew; a native English speaker who was bilingual in Hebrew back-translated measures to verify correspondence with the original versions. Because we were assessing volunteers in their occupational settings, short forms of measures were used whenever possible.

**Character strengths.** The Inventory of Strengths (Peterson & Seligman, 2004) consists of 240 items, with 10 items assessing each of 24 strengths. Because of restrictions on the length of the survey that we were able to administer in these organizations, we first presented short descriptions of the 24 character strengths, as they appear in the Hebrew translation of Seligman's book 'Authentic Happiness' (Seligman, 2005). To assess personal endorsement of character strengths, we used the positively worded sentences of the short-form strengths assessment published in Seligman (e.g., 'I'm constantly curious about the

world' for curiosity; 'I never quit a task before it is done' for persistence). Participants rated each sentence in terms of how much it characterizes them, on a 5-point Likert scale ranging from 1 (not at all) to 5 (very much). To reflect strengths theory, we used the total sum score of the five most highly-rated strengths. Thus, scores, ranging from 5 to 25 ( $\alpha = 0.86$ ), represent participants' overall endorsement of signature strengths. Previous research has revealed that strengths derived from the long form of this scale correlated in expected direction with related personality traits (e.g., Steger et al., 2007). However, there is less validity evidence for the short form. Because strengths were measured with face valid items drawn from a published assessment, it seems reasonable to expect that scores reflect participants' strengths endorsement.

**Strengths deployment.** A measure of deployment of character strengths in occupational activities was compiled for this study. The names of the 24 character strengths from the Inventory of Strengths (Peterson & Seligman, 2004) were presented, and respondents were asked to reflect on their volunteer work and indicate the extent to which they have 'opportunity in your daily work to deploy each strength.' Items were rated from 1 (very little) to 5 (very much). Deployment of character strengths is the sum of all item scores. Scores ranged from 24 to 120 ( $\alpha = 0.88$ ).

**Satisfaction with volunteer activities.** The Gallup Workplace Audit was developed by The Gallup Organization (1999) based on focus groups, empirical research, and management research examining job satisfaction in many different organizations. Criterion-related validity is supported by results showing that employee scores on the Workplace Audit are positively associated with their employer's profitability and revenue growth (Harter et al., 2002). We adapted the original questionnaire to refer to volunteer activities (e.g., 'I know what is expected of me in my volunteer activities'). Respondents rated the 12 items from 1 (strongly disagree) to 5 (strongly agree), with total scale scores ranging from 12 to 60. The designers of the original questionnaire report high reliability as measured by Cronbach's alpha ( $\alpha = 0.91$ ) and high convergent validity between items (Gallup Organization, 1999). In this study, reliability was acceptable ( $\alpha = 0.78$ ).

**Well-being.** The Mental Health Inventory (MHI; Veit & Ware, 1983) is a structured, self-report questionnaire developed as part of the National Health Insurance Study. Factor analytic evidence supports the structure of the scale, and the possibility of using higher-order factor scores (distress and well-being) in the original

Table 1. Descriptive scale statistics.

	MDA		Civil Guard		Women's organization		F
	M	SD	M	SD	M	SD	
Character strengths	24.04 <sup>a</sup>	1.59	23.55 <sup>b</sup>	1.69	24.21 <sup>a</sup>	1.47	4.77*
Strength deployment	92.37 <sup>a</sup>	13.19	100.52 <sup>b</sup>	11.77	100.65 <sup>b</sup>	13.40	13.76***
Satisfaction	45.70 <sup>a</sup>	6.91	48.68 <sup>b</sup>	6.38	48.49 <sup>b</sup>	6.37	6.49**
Well-being	58.30 <sup>a</sup>	10.50	59.62 <sup>a</sup>	8.82	64.83 <sup>b</sup>	9.91	12.65***
Meaning in life	26.26	6.12	28.61	3.96	–	–	3.22**,†
Meaning in work	–	–	–	–	16.65	2.87	–

Notes: Mean scores with different superscripts differ at  $p < 0.05$ .

†denotes value from a  $t$ -test with 198 degrees of freedom.

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

version (Veit & Ware, 1983) and Hebrew version used in this study (Florian & Drori, 1990). We used only the psychological well-being scale, which includes 16 items referring to the participant's feelings over the last month (e.g., 'I feel that the future is promising and full of hope.' Items were rated from 1 (none of the time/not satisfied at all) to 5 (all the time/very satisfied), with total scale scores ranging from 16 to 80. Both the original questionnaire (Veit & Ware, 1983) and the Hebrew translation (Florian & Drori, 1990) reported high reliability as measured by Cronbach's alpha ( $\alpha = 0.94$  and  $0.96$ , respectively). In this study, reliability was high ( $\alpha = 0.90$ ).

*Meaning in life.* The Meaning in Life Questionnaire (MLQ) was developed by Steger et al. (2006). The original questionnaire consists of two subscales: presence of meaning in life and search for meaning in life. This study used only the 5-item presence subscale (e.g., 'My life has a clear purpose'). Items were rated from 1 (absolutely untrue) to 7 (absolutely true); there was one reverse-scored item and scores ranged from 5 to 35. The MLQ subscale scores are stable over time periods ranging from 1 month (Steger et al., 2006) to 1 year (Steger & Kashdan, 2007), and are correlated as expected with other well-being and distress variables (e.g., Steger, Kashdan, Sullivan, & Lorentz, 2008; Steger, Oishi, & Kashdan, 2009; Steger & Shin, in press; Steger et al., 2006). The authors of the presence of meaning in life scale reported high reliability ( $\alpha = 0.88$ ). Item reliability in this study was acceptable ( $\alpha = 0.79$ ).

#### Procedure

After obtaining authorization from MDA, questionnaires were distributed during 2008 by volunteer coordinators at their sites. Before completing the questionnaires, participants received a brief explanation about the purpose of the study, their anonymity was assured, and they were told that they could

withdraw at any time without completing the questionnaires. Participation was voluntary and almost all the contacted agreed to take part in the study (only four declined). Questionnaires were completed in on-site group sessions.

#### Results

Descriptive statistics for all scales are presented in Table 1. Men reported higher levels of well-being than women ( $M = 61.41$  and  $56.20$ , respectively,  $t(95) = 2.45$ ,  $p < 0.05$ , Cohen's  $d = 0.49$ ). Age ( $r = 0.19$ ,  $p < 0.05$ ) and tenure of volunteering ( $r = 0.24$ ,  $p < 0.05$ ) were positively related with satisfaction with volunteer activities.

Correlations among variables indicated that hypotheses were generally confirmed (Table 2). Endorsement and deployment of character strengths were positively related ( $H1$ ); endorsing was related to well-being ( $H3$ ); deploying character strengths was related to satisfaction with vocational activities, well-being, and meaning in life ( $H4-H6$ ); meaning in life was related to well-being and satisfaction with vocational activities ( $H7$  and  $H8$ ); and well-being and satisfaction with vocational activities were related ( $H9$ ). However, strengths endorsement and meaning were not significantly related, in contrast to  $H2$ .

#### Testing the integrative model

We used AMOS 17.0 (Arbuckle, 2008) to test the integrative model within a structural equation modeling framework (the general model is shown in Figure 1, Panel A). The model's fit to the data was evaluated using three common goodness-of-fit measures. The  $\chi^2$  measure states the proximity of the data-based model to the hypothetical model, and therefore it is expected to be nonsignificant. Normed Fit Index (NFI) represents the ratio of the difference between the  $\chi^2$  scores of the independent specified models, and root mean square error of approximation (RMSEA) takes into consideration the error of approximation for the

Table 2. Correlations between character strengths, their deployment, satisfaction with volunteer activities, well-being, and presence of meaning in life among volunteers, Study 1.

		1	2	3	4
Study 1a					
1	Character strengths				
2	Strength deployment	0.28**			
3	Satisfaction	0.23**	0.53**		
4	Well-being	0.25**	0.40**	0.46**	
5	Meaning in life	0.18	0.27**	0.32**	0.55**
Study 1b					
1	Character strengths				
2	Strength deployment	0.21*			
3	Satisfaction	0.09	0.48**		
4	Well-being	0.52**	0.33**	0.10	
5	Meaning in life	0.34**	0.32**	0.22*	0.38**
Study 2					
1	Character strengths				
2	Strength deployment	0.35**			
3	Satisfaction	0.28**	0.43**		
4	Well-being	0.50**	0.67**	0.52**	
5	Meaning in work	0.34**	0.46**	0.54**	0.56**

Notes: Study 1a, MDA volunteers,  $N=100$ ; Study 1b, Civil guard volunteers,  $N=100$ ; Study 2, Women's organization employees,  $N=102$ .

\* $p < 0.05$ ; \*\* $p < 0.01$ .

population.  $NFI > 0.90$  and  $RMSEA < 0.06$  are considered good measures of fit (Arbuckle, 2008).

The model described above appeared highly compatible with the data, as indicated by all three fit indices ( $\chi^2(N=100, df=4)=2.24$ , n.s.;  $NFI=0.98$ ;  $RMSEA=0.00$ , 90%  $CI=0.00-0.12$ ). Two of the bivariate correlations did not retain significance in the multivariate model (Figure 1, Panel B). In particular, endorsing and deploying character strengths were not significantly related to well-being in the full model. It may be that adolescents have had less time to truly identify and appreciate their signature strengths, curtailing the influence of strengths endorsement on broad-level indicators of optimal functioning like meaning in life and well-being. However, when they find opportunities to deploy their strengths, they do feel satisfaction from the activity and meaning in life.

### Study 1b: Adults

One limitation of Study 1a was the youth and age homogeneity of the sample. The purpose of Study 1b was to test the model in a more age-diverse sample, while also examining relations among the variables among people engaged in a very different kind of volunteer organization.

### Method

#### Participants

The participants in Study 1b consisted of 100 adults (32% female; mean age,  $M=38.7$ ,  $SD=13.15$ ), who

volunteer in the Civil Guard in the cities of Ariel and Jerusalem. The Civil Guard was established in Israel as a community-based project initially aimed at preventing terrorist attacks in residential neighborhoods. In 1986, the Civil Guard was integrated in the Israel police and its operations have increased over time. Today, the organization also deters criminals by assisting the police and providing enforcement services (Reiser, 2007). Participants were engaged in their volunteer work from 3 months to 20 years ( $M=3.4$ ). Most of the volunteers were also employed (81%). Forty-two percent had academic degrees, 13% had a postsecondary education, while the rest (45%) had high school education. Sixty-five percent defined themselves as secular, 14% traditional and 20% religious.

#### Instruments

Studies 1a and 1b used the same measures. Evidence of reliability was good in this present sample for the Short Inventory of Strengths ( $\alpha=0.84$ ), Deployment of Strengths ( $\alpha=0.93$ ), Satisfaction with Volunteer Activities ( $\alpha=0.86$ ), Well-Being ( $\alpha=0.93$ ), and Meaning in Life ( $\alpha=0.76$ ).

#### Procedure

Participants were recruited, and questionnaires were administered, using similar procedures as those described for Study 1a. All those contacted agreed to take participate.



## Results

Descriptive statistics for all of the scale scores are presented in Table 1. In contrast to the MDA volunteers, no gender differences were found in the Civil Guard volunteers (all  $t$ 's < 1.4, all  $p$ 's n.s.). Age was significantly related to the presence of meaning in life ( $r = 0.37$ ,  $p < 0.01$ ) and well-being ( $r = 0.26$ ,  $p < 0.05$ ). Tenure of volunteering was positively related to meaning in life ( $r = 0.23$ ,  $p < 0.05$ ), well-being ( $r = 0.23$ ,  $p < 0.05$ ), and satisfaction with volunteer activities ( $r = 0.27$ ,  $p < 0.01$ ).

Hypotheses were generally confirmed (Table 2). Endorsement and deployment of character strengths were related ( $H1$ ); endorsing character strengths was related to both well-being and meaning in life ( $H2$  and  $H3$ ); deploying character strengths was related to satisfaction with vocational activities, well-being, and meaning in life ( $H4$ – $H6$ ); and meaning in life was related to well-being and satisfaction with vocational activities ( $H7$  and  $H8$ ). However, well-being and satisfaction with volunteer activities were not significantly related, in contrast to  $H9$ .

### Testing the integrative model

The results of model testing for Study 1b are shown in Figure 1 (Panel C). The model appears compatible with the data, according to  $\chi^2$  and NFI, although the RMSEA indicated a marginally acceptable fit ( $\chi^2(N = 100, df = 4) = 6.01$ , n.s.; NFI = 0.95; RMSEA = 0.07, 90% CI = 0.00–0.1). Most of the paths were significant, although some of them were low (Figure 1c), perhaps explaining the lower fit in this sample. In particular, satisfaction with volunteer activities was not related to well-being or to meaning in life.

### Discussion of Study 1

We tested an integrative model linking character strengths, meaning in life, and well-being in the context of the deployment of character strengths in a volunteer setting and satisfaction with vocational activities life in two distinct samples of volunteers. Bivariate correlational analyses supported nearly all of the model hypotheses in both studies. However, differences between the correlation matrix (Table 2) and the structural model (Figure 1, Panel B) illustrate the importance of placing related variables in context with each other; the complexity and multiply-determined nature of psychological research demands multivariate analytical strategies.

Although the model fit the data for both samples, specific paths varied by sample. The most consistent results across the two samples were positive relations between endorsing character strengths and deploying

them in volunteer activities, and between deploying character strengths and satisfaction with volunteer activities, supporting character strengths theory (Peterson & Seligman, 2004). The positive relation between deploying character strengths and meaning in life was also consistent across both samples, replicating findings from Steger et al. (2007).

Differences in significant paths between samples raise the question of the kinds of factors that might influence how people derive well-being from their volunteer experiences. One notable difference between the two samples is age, and the previous research suggests that older people are more likely to endorse strengths (Ruch et al., 2010). However, in our results, there was no significant relation between age and endorsing character strengths. Rather, our older sample reported higher levels of meaning in life, which is consistent with previous research (e.g., Steger et al., 2009). Thus, in our model, age might signify an independent contributor to people's ability to derive meaning and well-being from their lives, making it important to test the model in additional samples of adults. The two samples also differed in terms of the specific activities involved in their volunteering. Whereas the MDA volunteers were engaged in activities like responding to accidents, collecting donated blood, and caring for the elderly, the Civil Guard volunteers were engaged in activities like maintaining vigilance for terrorist or criminal acts. In other words, MDA volunteers were seeking out opportunities to help, whereas Civil Guard volunteers were trying to prevent harm. These different foci correspond to broad motivational distinctions between an *approach focused* (looking for opportunities to bring about desired outcomes) – which is associated with well-being – and being *avoidance focused* (being wary to try to avoid undesired outcomes) – which is associated with psychological distress (e.g., Elliot & Church, 2002). Alternatively, the activities of the Civil Guard volunteers could be more exhausting than those of MDA volunteers. Work-related exhaustion is highly detrimental to well-being (A. Sousa-Poza & A.A. Sousa-Poza, 2000). Although differences in volunteer activities may be important for understanding the relation between character strengths and well-being, occupational activities typically occur in the context of paid work, making it important to test the model among paid employees.

### Study 2

Understanding whether and how character strengths contribute to well-being through paid work informs both character strengths theory, and helps link the segregated literatures on work and volunteer experience. Therefore, we conducted a second study to test

the model in a sample of working adults. The shift from unpaid volunteering to paid employment mandated adapting measures to pertain to paid work. In addition, because this was a working sample, we sought to explore whether meaning in work played a similar role as meaning in life in terms of work satisfaction and overall well-being (cf. Steger, Pickering, Shin, & Dik, 2010). Thus, Study 2 sought to establish the viability of this model of how character strengths relate to work meaning, work satisfaction, and overall well-being in a working sample.

## Method

### Participants

Participants were recruited from NA'AMAT, a nationwide women's organization providing many services (e.g., day care, law advising, and labor rights) for working women, especially for working mothers. The present sample consisted of 102 women (mean age,  $M = 44.5$ ,  $SD = 8.8$ ). Most of the women were married (74.5%), 21.5% were divorced and the rest were single (2%) or widowed (2%). Most were employed part-time (61.8%). The average work tenure ranged from 1 to 25 years ( $M = 11.8$ ,  $SD = 6.1$ ).

### Instruments

Most of the questionnaires from Studies 1a and 1b were used in Study 2. Evidence of reliability was good in the present sample for the Short Inventory of Strengths ( $\alpha = 0.86$ ), Deployment of Strengths ( $\alpha = 0.93$ ), and Well-Being ( $\alpha = 0.93$ ). We used the original version of the Gallup Audit to measure job satisfaction ( $\alpha = 0.83$ ). We replaced the measure of meaning in life with an available measure of meaning in work.

**Meaning in work.** The Work as Meaning Inventory (WAMI) was developed to assess several dimensions of meaningful work (Steger & Dik, 2009a). The full WAMI is comprised of 17 items and produces several subscales. The scale reliability ( $\alpha$ 's = 0.82 to 0.84), structure, and psychometric properties were initially validated among workers in the United States, with validity indicated by positive correlations between meaning in work positively and job satisfaction, intrinsic work motivation, and well-being (Steger & Dik, 2009a). Following translation and back translation by the first author and a bilingual English–Hebrew speaker, the Meaningful Work Index, consisting of 7 items (3 reverse-scored items) was administered for use in this study. However, item analysis revealed that none of the reverse-scored items had acceptable item-total scale correlations (all  $< |0.10|$ ) in this Israeli sample. Therefore, only positively worded items

were used, yielding a 4-item meaningful in work scale. The items roughly parallel the items for the MLQ, referring to work instead of life (e.g., 'I have discovered work that has a satisfying purpose'). The reliability of the scale, whose scores ranged from 5 to 20, was satisfactory in the present sample ( $\alpha = 0.75$ ).

### Procedure

Questionnaires were administered during 2008. Site supervisors simply passed the questionnaires around and workers were free to complete them or not, without being monitored by supervisors. All distributed questionnaires were returned.

## Results

Descriptive statistics are presented in Table 1. There were no significant effects for the demographic variables assessed.

Correlation analyses revealed support for all of our hypotheses (Table 2).

### Comparisons of scale scores across studies

We conducted ANOVAs (and *t*-tests as appropriate) to examine whether scale scores varied across different samples. The MDA volunteers reported lower scores than the other two samples on measures of strengths deployment, satisfaction with vocational activities, and well-being, as well as lower meaning in life scores than Civil Guard volunteers. Civil Guard volunteers reported lower scores in character strengths than the other two samples. NA'AMAT employees generally scored as high as or higher than volunteers.

### Testing the integrative model

The results of model testing for Study 2 are shown in Figure 1 (Panel D). The model fit the data very well ( $\chi^2(N = 100, df = 4) = 4.86$ , n.s.; NFI = 0.98; RMSEA = 0.05, 90% CI = 0.00–0.16). Most of the paths were significant (Figure 1, Panel D). However, well-being was not related to job satisfaction or to work meaning.

## Discussion of Study 2

Study 2 tested the model in a working sample. Converging with Study 1, positive relations were identified between endorsing character strengths and deploying them in volunteer activities. Another important common finding was that deploying character strengths was related both to satisfaction with volunteer (or paid) activities, and to meaning in life (Study 1) and work (Study 2). In comparing the specific paths with Studies 1a and 1b, there appears to be greatest

similarity between NA'AMAT workers and Civil Guard volunteers (Study 1b). For example, paths from character strengths endorsement to meaning (work meaning in Study 2) and well-being were significant in these studies, and also path from deployment to well-being (Figure 1c and d). Thus, Study 2 provides important initial evidence that endorsing strengths and deploying them in the workplace is related to well-being and that endorsing strengths is important to life and work meaning.

### General discussion

The principal aim of this investigation was to propose and test an integrative model linking character strengths endorsement and deployment with three theorized positive outcomes, meaning in life and work, satisfaction with vocational activities, and well-being. In this integrative model, we proposed that endorsing one's character strengths was related directly to greater satisfaction in one's vocational activities and indirectly to greater well-being in one's life in general through deploying character strengths in vocational lives. We also proposed that endorsing strengths was related to greater meaning in life, which was related to greater satisfaction in one's vocational activity. The studies presented here support the idea underlying the model – the recognition and active use of one's strengths in one's vocational activities are related to greater vocational satisfaction, greater well-being, and a more meaningful experience in work and in life. These findings add an important dimension to the contemporary perception that developing character strengths leads to increased prospects of a life of prosperity and well-being (Park & Peterson, 2008). Importantly, these results also provide an opportunity to assess predictions drawn from the supposedly universalist strengths theory (Peterson & Seligman, 2004) in a culture that is neither European nor North American. The fact that we were able to draw hypotheses from the general strengths literature and find support for them in an Israeli sample lends some support to the idea that strengths may, indeed, be a universal platform for understanding human excellence.

We tested this model in two different samples of volunteers and in a sample of working adults. The good model fit in all samples is encouraging, and provides a novel contribution through its fit to three very different samples. We tested the model in a relatively homogenous sample of teenagers providing volunteer medical services (Study 1a), in a sample of mostly male adults from all age groups who volunteered to protect their neighbors from crime and terrorism (Study 1b), and in a sample of diversely aged women employed to provide a variety of

services (Study 2). The model apparently captured important elements among people providing medical, law enforcement, and family support services. Thus, the integrative model appears flexible and robust in describing most relations among character strengths and well-being among young and old men and women engaged in diverse vocational activities within Israel. One of the major contributions of this study is to demonstrate a way in which common psychological factors can be united to highlight how vocational activity can provide meaning, satisfaction, and well-being to people engaged in both paid and voluntary work. In addition to representing the first examination of character strengths among volunteers, and providing a model for understanding ways in which character strengths can lead to better lives, this project provides evidence of a common process shared by both volunteers and paid workers.

This latter point is particularly important, as research on volunteers is often sequestered from research on 'working' people who earn money through their labor. In this study, there were many more similarities than differences, suggesting that much can be learned about how people engage with the world around them through either paid or voluntary labor. Several distinct motivations to volunteer have been identified and these motivations have consequences, such as satisfaction and duration of service (e.g., Omoto & Snyder, 1995). Although volunteering is often associated with prosocial motivations, some suggest that volunteering serves relatively self-centered needs (Clary, Snyder, & Stukas, 1996). This study cannot speak to the motives of these volunteers, but it does suggest that people's motivations for volunteering may influence eventual well-being outcomes. At the same time, the activities of all three of the samples we studied could be construed as helping others, either through medical, policing, or family support services. Perhaps, there is a pervading prosocial concern across all three samples, diminishing potential differences that might have emerged if we had studied volunteers in comparison to workers paid to do jobs that do not have an immediately apparent prosocial result.

At the same time, there were discrepancies in the significance of certain paths in the model across the three samples. Most notably, although endorsing signature strengths was related to deploying character strengths in all three samples, among *adolescents*, endorsing signature strengths was not related to either meaning in life or well-being. This suggests that there may be some developmental arc in the way in which people come to recognize and embrace their signature strengths, and that the 'benefits' of doing so may rely on achieving a level of certainty and familiarity that only time and age can provide.

The conclusions derived from this study must be tempered by certain limitations. First, the relatively

small sample size raises questions about how representative participants are of others engaged in similar vocational activities. Future research should continue to test whether the integrative model pertains to people engaged in a wide variety of vocational pursuits. In particular, future research could formally test any potential differences in the significance of paths in the model, comparing additional working samples to volunteer samples. Second, this study relied on self-report questionnaires. For example, such measures are blind to whether respondents are actually *good* volunteers. Third, although concerns about the validity of the character strengths measures were somewhat allayed by using the most representative, face valid items, more research is needed to determine whether the short form we used to identify signature strengths is fully valid. In addition, because of the measurement strategy we used to assess strengths deployment, we were not able to calculate whether respondents felt they had the opportunity to use their most highly prized signature strength in their vocational activities. The measure of deployment of strengths used in this study referred to the degree to which people felt they used all of the strengths. It is likely that stronger relations between strengths deployment and work-related and well-being outcomes would be found using a measurement approach that allowed participants to identify their signature strengths and then asked about deployment of those specific strengths. Fourth, these studies were cross-sectional, so we could not test the causal relations implied by our depiction of the integrative model. Longitudinal studies could weigh the precedence of the ‘upstream’ variables in the model. For example, it could be tested whether changes in deploying character strengths, precede changes in meaning in life, job satisfaction, and well-being. Fifth, our working sample (Study 2) consisted only of women, and this study cannot provide information about differences that may exist between working women and working men. Finally, dissatisfied volunteers and employees probably do not persevere for long, which could lead to a restriction of range, particularly on measures of deploying strengths and feeling satisfied with vocational activities. It would be interesting to enroll volunteers and employees in research early in their tenure and track whether the variables comprising the integrative model predict satisfaction, meaning, and well-being among all participants, and whether satisfaction and deployment of strengths predict persistence and retention.

### Conclusion

This research represents a novel effort to link the recognition and deployment of character strengths on

people’s vocational activities to their satisfaction with such activities, and also to their ultimate well-being and meaning in life. In particular, we found that simply endorsing a characteristic as a personal strength was less consistently linked to positive work and well-being variables than actually having the chance to deploy those strengths in one’s vocational activities. Thus, it may not be sufficient to simply think some piece of ourselves is important; it may be vital to enact that piece of ourselves in important domains of life. The model provides vocational and organizational researchers with testable hypotheses, as well as a way to understand how people perceive their selves, how they use their selves in their vocations, and how they derive well-being and meaning from their work. In addition, we have shown how this model pertains to people of all ages, engaged in a diversity of paid and voluntary activities. Future research building on this model can continue to increase our comprehension of how using ‘the best of ourselves’ in our vocations contributes to flourishing and well-being.

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